



Department of Energy
Washington, DC 20585

We would like to invite you to participate in a workshop on "Large Scale Production Computing Requirements for Biological and Environmental Research." The workshop will be held on May 7-8, 2009, in the Washington, DC, area.

The goal of this workshop is to accurately characterize the High Performance Computing (HPC) requirements of current and future work funded by the Office of Biological and Environmental Research (BER). These requirements will serve as input to the NERSC architecture and planning processes, and will help ensure that NERSC continues to provide world-class support for scientific discovery for DOE scientists and their collaborators. The tangible outcome of the workshop will be a document that includes both the HPC requirements and a supporting narrative.

The mission of the NERSC Facility is to accelerate the pace of scientific discovery by providing HPC, information, data, and communications services for research sponsored by the Office of Science (SC). NERSC is the principal provider of production HPC services for SC Programs. NERSC has been serving a large number of "broad impact" computational science users as well as a smaller number of "high impact" scientific users.

NERSC regularly updates and refreshes its understanding of the HPC requirements of the science programs in Greenbook and other user-driven or NERSC-driven documents every three-four years. NERSC also publishes "Science-Driven Computing: NERSC's Plan." This plan document is the closest to capture SC's needs, and has been published every 5 years. Since science needs are changing very rapidly, the five-year cycle no longer captures the changing needs very effectively. NERSC also needs more computation-oriented data than those currently collected using the existing mechanisms. To fill the gap of accurately characterizing science and computation-centric needs for NERSC resources from the Headquarters' perspective, Associate Director of the Office of Advanced Scientific Computing Research (ASCR) recognized the need for a new mechanism to gather HPC resource needs.

The mechanism by which NERSC obtains this information is by holding a workshop with each Program Office in the Office of Science every 3 years. The first workshop is with the BER Program, which is supported by the BER Associate Director.

The workshop will be conducted following the proven framework developed by ESnet, which has conducted similar requirements gathering workshops with the Program Offices in the past. Designated BER Program Managers, NERSC Program Manager, and NERSC personnel have tailored the workshop format and mechanism to meet BER/NERSC-specific needs. Detailed workshop information and reference materials will be available at the workshop wiki shortly.

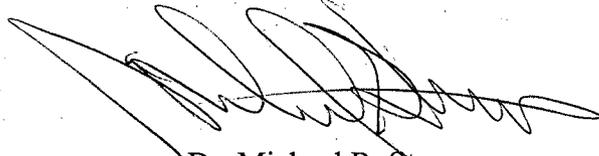
Please respond to Dr. Yukiko Sekine (yukiko.sekine@science.doe.gov), NERSC Program Manager, confirming your attendance no later than March 2, 2009.



We believe that this workshop will help NERSC maintain its reputation as the flagship production computing facility for SC and will enhance scientific productivity in the solution of biological, climate, and environmental research problems over the course of the next decade. Thank you again for your participation.



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